

Tim Hollkamp  
Toyota Industrial Equipment Mfg., Inc.  
P.O. 2487  
Columbus, IN 47202-2487

Re: **005-11174**  
Second Administrative Amendment to  
**Part 70 005-7545-00040**

Dear Mr. Hollkamp:

Toyota Industrial Equipment Manufacturing, Inc. was issued a permit on April 14, 1999, for a stationary industrial truck manufacturing source. The first Administrative Amendment was issued on July 21, 1999. A letter requesting a change was received on July 23, 1999. Pursuant to the provisions of 2-7-11 the permit is hereby administratively amended as follows:

Sixteen (16) additional metal inert gas (MIG) welding stations will be installed in order to accommodate the movement of processes to facilitate the new seven (7) series fork truck. These welding units are insignificant activities (see page 1 of 1 of Administrative Amendment Appendix A for calculations). The welding units will be subject to 326 IAC 6-3-2(c), and will be limited by the following:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

The current required range of the pressure drop across the dust collectors at the one (1) large parts shot blast (U009), one (1) small parts shot blast (U010), and one (1) steel shot blast (U011) is 2.0 to 6.0 inches of water. When the filters are changed, the pressure drop temporarily falls below 2.0 inches. The required pressure drop will be changed to be maintained within the range of 1.0 and 6.0 inches of water or a range established during the latest stack test.

As a result of these changes Section A.3 and the facility description in Section D.3 have been revised as follows:

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)]  
[326 IAC 2-7-5(15)]

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This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units per hour. Forty-three (43) emission units with a total heat input capacity of 29.33 million British thermal units per hour. Includes, two (2) boilers rated at 0.75 million British thermal units per hour.
- (b) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to

326 IAC 20-6. Two (2) parts cleaners, using non-VOC materials, with capacities of 60 and 80 gallons, and one (1) maintenance parts cleaner, using mineral spirits, with a capacity of 16 gallons.

- (c) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches soldering equipment, welding equipment.
- (d) Grinding and machining operations controller with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4,000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations.
- (e) Other activities or categories with emissions equal to or less than the insignificant activity thresholds:
  - (1) One (1) counter-weight sanding booth, identified as I003, controlled by a dry filter, and exhausting to stack S003c.
  - (2) One (1) powder coat line, identified as I011, controlled by a primary and secondary filter and exhausting to the building.
  - (3) Ninety-nine (99) metal inert gas (MIG) welding stations.
  - (4) Two (2) powder coating booths, identified as I012, with a maximum raw material usage rate of 4861 gallons per year, one line consists of a powder reclamation process, both lines are controlled voluntarily by a two (2) stage filtration system consisting of HEPA filters in series and the filters exhaust to the atmosphere.
  - (5) Seven (7) metal inert gas (MIG) welding stations in process B300.
  - (6) Sixteen (16) metal inert gas (MIG) welding stations.**

### SECTION D.3 FACILITY OPERATION CONDITIONS

#### Facility Description [326 IAC 2-7-5(15)] - Insignificant Activities

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units per hour. Forty-three (43) emission units with a total heat input capacity of 29.33 million British thermal units per hour. Includes, two (2) boilers rated at 0.75 million British thermal units per hour.
- (b) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6. Two (2) parts cleaners, using non-VOC materials, with capacities of 60 and 80 gallons, and one (1) maintenance parts cleaner, using mineral spirits, with a capacity of 16 gallons.
- (c) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches soldering equipment, welding equipment.
- (d) Grinding and machining operations controller with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4,000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations.
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  - (2) One (1) powder coat line, identified as I011, controlled by a primary and secondary filter and exhausting to the building.
  - (3) Ninety-nine (99) metal inert gas (MIG) welding stations.
  - (4) Two (2) powder coating booths, identified as I012, with a maximum raw material usage rate of 4861 gallons per year, one line consists of a powder reclamation process, both lines are controlled voluntarily by a two (2) stage filtration system consisting of HEPA filters in series and the filters exhaust to the atmosphere.
  - (5) Seven (7) metal inert gas (MIG) welding stations in process B300.
  - (6) Sixteen (16) metal inert gas (MIG) welding stations.**

Conditions D.2.6 and D.4.7 have been revised as follows:

#### D.2.6 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouses (C009 and C010) used in conjunction with the shot blasting processes, at least once weekly when the shot blasting is in operation when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouses shall be maintained within the range of ~~2.0~~ **1.0** and 6.0 inches of water or a range established during the

latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAM, and shall be calibrated at least once every six (6) months.

**D.4.7 Parametric Monitoring**

The Permittee shall record the total static pressure drop across the dust collector used in conjunction with the shot blast unit, at least once weekly when the shot blast unit is in operation when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the dust collector shall be maintained within the range of 2-θ 1.0 and 6.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAM, and shall be calibrated at least once every six (6) months.

All other conditions of the permit shall remain unchanged and in effect. Please attach a copy of this amendment and the following revised permit pages to the front of the original permit.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact CarrieAnn Ortolani, c/o OAM, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, at 516-691-3395 or in Indiana at 1-800-451-6027 (ext 516-691-3395).

Sincerely,

Paul Dubenetzky, Chief  
Permits Branch  
Office of Air Management

CAO/MES

Attachments

cc: File - Bartholomew County  
U.S. EPA, Region V  
Bartholomew County Health Department  
Air Compliance Section Inspector - D. J. Knotts  
Compliance Data Section - Karen Nowak  
Administrative and Development - Janet Mobley  
Technical Support and Modeling - Michele Boner

**PART 70 OPERATING PERMIT  
and ENHANCED NEW SOURCE REVIEW  
OFFICE OF AIR MANAGEMENT**

**Toyota Industrial Equipment Manufacturing, Inc.  
5555 Inwood Drive  
Columbus, Indiana 47202**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 and 326 IAC 2-1-3.2 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T 005-7545-00040	
Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Management	Issuance Date: April 14, 1999

First Administrative Amendment 005-10989-00040, issued on July 21, 1999

Second Administrative Amendment: 005-11174-00040	Pages Affected: 7, 37, 39 and 43
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date:

- (g) One (1) small parts shot blast cabinet, identified as U010, constructed in 1992, exhausting to a baghouse (C009) and exiting into the building, capacity: 60,000 pounds of shot per hour.
- (h) One (1) steel shot blast unit, with a maximum blast rate of 115,500 pounds per hour, controlled by a dust collector, designated as U011, and exhausts inside the building.

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)]  
[326 IAC 2-7-5(15)]

---

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units per hour. Forty-three (43) emission units with a total heat input capacity of 29.33 million British thermal units per hour. Includes, two (2) boilers rated at 0.75 million British thermal units per hour.
- (b) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6. Two (2) parts cleaners, using non-VOC materials, with capacities of 60 and 80 gallons, and one (1) maintenance parts cleaner, using mineral spirits, with a capacity of 16 gallons.
- (c) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches soldering equipment, welding equipment.
- (d) Grinding and machining operations controller with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4,000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations.
- (e) Other activities or categories with emissions equal to or less than the insignificant activity thresholds:
  - (1) One (1) counter-weight sanding booth, identified as I003, controlled by a dry filter, and exhausting to stack S003c.
  - (2) One (1) powder coat line, identified as I011, controlled by a primary and secondary filter and exhausting to the building.
  - (3) Ninety-nine (99) metal inert gas (MIG) welding stations.
  - (4) Two (2) powder coating booths, identified as I012, with a maximum raw material usage rate of 4861 gallons per year, one line consists of a powder reclamation process, both lines are controlled voluntarily by a two (2) stage filtration system consisting of HEPA filters in series and the filters exhaust to the atmosphere.
  - (5) Seven (7) metal inert gas (MIG) welding stations in process B300.
  - (6) Sixteen (16) metal inert gas (MIG) welding stations.

blast cabinet is in operation.

### **Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]**

#### **D.2.5 Visible Emissions Notations**

- (a) Daily visible emission notations of the baghouse stacks exhausts shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

#### **D.2.6 Parametric Monitoring**

The Permittee shall record the total static pressure drop across the baghouses (C009 and C010) used in conjunction with the shot blasting processes, at least once weekly when the shot blasting is in operation when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouses shall be maintained within the range of 1.0 and 6.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAM, and shall be calibrated at least once every six (6) months.

#### **D.2.7 Baghouse Inspections**

An inspection shall be performed each calendar quarter of all bags controlling the shot blasting operations when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.

#### **D.2.8 Broken Bag or Failed Bag Detection**

In the event that bag failure has been observed:

- (a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the

## SECTION D.3 FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-7-5(15)] - Insignificant Activities

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units per hour. Forty-three (43) emission units with a total heat input capacity of 29.33 million British thermal units per hour. Includes, two (2) boilers rated at 0.75 million British thermal units per hour.
- (b) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6. Two (2) parts cleaners, using non-VOC materials, with capacities of 60 and 80 gallons, and one (1) maintenance parts cleaner, using mineral spirits, with a capacity of 16 gallons.
- (c) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches soldering equipment, welding equipment.
- (d) Grinding and machining operations controller with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4,000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations.
- (e) Other activities or categories with emissions equal to or less than the insignificant activity thresholds:
  - (1) One (1) counter-weight sanding booth, identified as I003, controlled by a dry filter, and exhausting to stack S003c.
  - (2) One (1) powder coat line, identified as I011, controlled by a primary and secondary filter and exhausting to the building.
  - (3) Ninety-nine (99) metal inert gas (MIG) welding stations.
  - (4) Two (2) powder coating booths, identified as I012, with a maximum raw material usage rate of 4861 gallons per year, one line consists of a powder reclamation process, both lines are controlled voluntarily by a two (2) stage filtration system consisting of HEPA filters in series and the filters exhaust to the atmosphere.
  - (5) Seven (7) metal inert gas (MIG) welding stations in process B300.
  - (6) Sixteen (16) metal inert gas (MIG) welding stations.

### Emission Limitations and Standards [326 IAC 2-7-5(1)]

#### D.3.1 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]

Pursuant to PC (03) 1733, issued on March 3, 1989, the one (1) maintenance parts washer using mineral spirits with a capacity of sixteen (16) gallons is subject to the requirements of 326 IAC 8-3-2 (Cold Cleaner Operations). Pursuant to this rule, the owner or operator of the one (1) parts washer shall:

- (a) Equip the cleaner with a cover;



- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

#### D.4.6 Dust Collector Inspections

An inspection shall be performed each calendar quarter of all the dust collector. Defective cartridges and collectors shall be replaced. A record shall be kept of the results of the inspection and the number of dust collectors and cartridges replaced.

#### D.4.7 Parametric Monitoring

The Permittee shall record the total static pressure drop across the dust collector used in conjunction with the shot blast unit, at least once weekly when the shot blast unit is in operation when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the dust collector shall be maintained within the range of 1.0 and 6.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAM, and shall be calibrated at least once every six (6) months.

#### D.4.8 Failure Detection

In the event that a dust collector's failure has been observed:

- (a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions)
- (b) For single compartment dust collectors, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

**Appendix A: Emissions Calculations  
Insignificant Welding Operations**

**Company Name:** Toyota Industrial Equipment Manufacturing, Inc.  
**Address City IN Zip:** 5555 Inwood Drive  
**Second Administrative Amendment:** 005-11174  
**Part 70:** T005-7545-00040  
**Reviewer:** CarrieAnn Ortolani  
**Date:** July 23, 1999

Amount of weld wire used 1997 (lbs)	Trucks Produced 1997 (units)	Weld Wire Usage Factor (lbs/unit)	Maximum Truck Production (units/hr)	Maximum Truck Production (units/yr)	Potential Weld wire Usage (lbs/hr)	Welding Stations in 1997 (units)	Potential Weld Wire Usage per Station (lbs/hr/station)
616680	14601	42.2	15.00	131400	634	99	6.40

Type of Welding	Number of New Stations	Electrode Type	Maximum Total Electrode Consumption (lbs/hr)	Emission Factors (lb pollutant/lb electrode consumed)		Potential Emissions (tons/year)	
				PM	Manganese	PM	Manganese
Metal Inert Gas (MIG)	16.0	Carbon Steel	102	0.0055	0.0005	2.47	0.224
Stick Welding	0.0	Carbon Steel	0.00	0.0370	0.0030	0.00	0.00
Oxyacetylene	0.0	Carbon Steel	0.00	0.0055	0.0005	0.00	0.00
<b>Total Potential Emissions (tons/yr):</b>						<b>2.47</b>	<b>0.224</b>

**METHODOLOGY**

Maximum total electrode consumption (lbs/hr) = potential weld wire usage per stations x number of new stations

Emissions (tons/yr) = Maximum Total Electrode Consumption per Unit \* Emission Factor (lb pollutant/lb electrode consumed) \* 8760 (hrs/yr) \* (1 ton/2000 lbs)

Emission Factors are from the SARA 313 Reporting Guide.